

The Vac Scene®

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A bi-monthly newsletter for
immunization providers, from
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IMMUNIZATION PROGRAM

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PREVNAR (PCV7) SHORTAGES RESULT IN SUSPENSION OF 4TH DOSE

The Centers for Disease Control and Prevention (CDC), the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP) have jointly **recommended that health care providers temporarily suspend routine use of the fourth dose of the pneumococcal conjugate vaccine (PCV7), the booster dose routinely given at 12-15 months of age.** The recommendation was made to conserve vaccine and minimize the likelihood of shortages caused by production and supply problems at Wyeth Vaccines, the only supplier of the vaccine in the United States.

Healthcare providers should move to a three-dose series of one dose at two months, one dose at four months, and one dose at six months. *Providers should continue to administer the fourth dose to children who are at increased risk of severe disease.* Children whose booster dose is deferred should receive PCV7 on their first visit after supplies return to normal. CDC estimates this action will help conserve more than 1 million doses by July 2004, making widespread or prolonged disruptions less likely. For more information, go to: <http://www.cdc.gov/nip/news/shortages/pcv7-shortage-faqs2-04.htm>

WAKEFIELD STUDY RE-EVALUATED BY EDITORS OF *THE LANCET*

On February 18, 2004, the editors of *The Lancet* were informed of serious allegations of research misconduct concerning an article by Dr. Andrew Wakefield and colleagues originally published in *The Lancet* in February, 1998. Wakefield's article, based on the study of 12 children, inferred that the development of autism was related to receiving the MMR vaccine. The study has since been discredited on scientific grounds.

Editor Dr. Richard Horton called it a "fatal conflict of interest" that Dr. Wakefield and his team of British scientists did not reveal that they were being paid by a legal-aid service looking into whether families could sue over the immunizations. Additional concerns exist about explanation of institutional and clinical review and referral procedures. Look for a commentary regarding the situation in a future issue of *The Lancet*. To review the Editor's statement, go to: www.thelancet.com/

Related to the controversy around the Wakefield study, the Immunization Action Coalition (IAC) recently developed web page, "Does MMR Vaccine Cause Autism? Examine the Evidence," gives health professionals a way to help parents research the allegation that vaccines might cause autism. The new web page contains links to journal article abstracts and related commentaries. IAC encourages health professionals to refer parents to the web page and to make and distribute copies of it themselves. To access the page directly, go to: <http://www.immunize.org/mmrautism>

VACCINES FOR CHILDREN (VFC) PROGRAM NEWS

Prevnar Delays

Once again, shipments of pneumococcal conjugate 7-valent ("Prevnar") are being delayed because increased demand has outpaced production. King County's VFC Program will fill orders as soon as possible. If you did not receive Prevnar you ordered, or got less than you expected, please know that we have your request on a back-order list and will send the Prevnar when it is available. *Please do not place a duplicate order.*

Pneumococcal Polysaccharide AND /OR Conjugate?

Pneumococcal **conjugate** 7-valent (Prevnar) was introduced in 2000 and by the next year had met with overwhelming acceptance among physicians and families. Uptake has been so rapid that the manufacturer has had difficulty meeting demand (see "Prevnar Delays"). The vaccine is recommended for **all infants**, with four doses due by the age of 15 months. It contains seven serotypes of *S. pneumoniae*, conjugated to a nontoxic variant of diphtheria toxin. These seven serotypes are known to account for 86% of bacteremia, 83% of meningitis, and 65% of acute otitis media among US children under 6 years.

Prior to the introduction of Prevnar, the only pneumococcal vaccine available was pneumococcal **polysaccharide** 23-valent (Pneumovax, PnuImmune). It contains polysaccharide antigen from 23 types of pneumococcal bacteria, which cause 88% of bacteremic pneumococcal disease. This vaccine was targeted specifically to **high-risk children** 2 years and older (2 doses by age 8) that are immunocompromised and vulnerable to complications from pneumococcal disease.

Since the introduction of Prevnar, usage of the pneumococcal **polysaccharide** vaccines in the Vaccines for Children Program has declined 65%, leading to concerns that health care providers think of Prevnar as a replacement, rather than a supplement to, the polysaccharide vaccine. **For high-risk children, both the conjugate and the polysaccharide vaccines are recommended.** You can protect your over 2 year old high-risk patients from serious disease by immunizing with both pneumococcal vaccines. Please call (206) 296-4774 and ask to speak with the immunization nurse if you have additional questions about pneumococcal vaccines.

Provider Agreement Renewals

Please call the VFC Program at (206) 296-4774 if you have **not** yet received your 2004 Outside Provider Agreement for Receipt of State-Supplied Vaccines. This is the yearly contract that enrolls your practice in the VFC Program. For those who do have the 2004 agreement, **please remember to return the original document (not a copy) to the VFC Program in the postage-paid envelope as soon as possible.**

NEW! RECOMMENDED CHILDHOOD AND ADOLESCENT IMMUNIZATION SCHEDULE, JANUARY-JUNE 2004

According to the Advisory Committee on Immunization Practices (ACIP), the recommended 2004 Childhood and Adolescent Immunization Schedule, a 6-month schedule effective through June, 2004, is now available. The reason for the six-month schedule is the ACIP has updated the recommendation for influenza vaccine for children 6-23 months old for the 2004-2005 flu season. The catch-up schedule was introduced for the first time in 2003 and remains the same in content. Changes made in the recommended childhood and adolescent immunization schedule for 2004 include:

- The schedule indicates a change in the recommendation for the minimum age of the last dose in the hepatitis B immunization schedule. The last dose in the vaccination series *should not be administered before age 24 weeks* (updating the previous recommendation to not administer the last dose prior to age 6 months);
- The range of recommended ages for the adolescent Td vaccine dose has been updated to *emphasize a preference for immunizing at age 11-12 years* with ages 13-18 years to serve as a catch-up interval;
- Clarification was added to the footnotes for the timing of the final vaccine doses in the series for diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine, Haemophilus influenzae type b (Hib) conjugate vaccine, and pneumococcal conjugate vaccine (PCV). *The final dose in the DTaP series should be given at >4 years. The final doses in the Hib and PCV series should be given at age >12 months.*
- An intranasally administered live, attenuated influenza vaccine (LAIV) is approved for use in the United States. For healthy person's age 5 to 49 years, LAIV is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV).

Healthy children aged 6-23 months are encouraged to receive influenza vaccine for the current influenza season. Children in this age group are at substantially increased risk for influenza-related hospitalizations. *The ACIP has recommended that beginning in the fall 2004; children aged 6-23 months will be recommended to receive annual influenza vaccine.* An updated childhood and adolescent immunization schedule for July – December 2004 is expected to be released to reflect this change.

The ACIP, the AAP, and the AAFP have approved the schedule. Current immunization schedules for children and adolescents and adults can be found on the NIP website at: www.cdc.gov/nip

JAMA ARTICLE ON VARICELLA EFFECTIVENESS RECEIVES MEDIA ATTENTION

A study on the varicella vaccine (Varivax) effectiveness over time received mixed media attention recently. The study, which assessed the effectiveness of the vaccine based on time since vaccination and age at the time of vaccination, was cited in the February 18th issue of the *Journal of the American Medical Association (JAMA)*.

Although some of the media coverage insinuated that the vaccine lacks effectiveness, the authors of the article conclude that their study affirms the overall efficacy of the varicella vaccine, an overall effectiveness of 87%, and that most vaccinated children who develop chickenpox have mild disease.

The degree of effectiveness decreased during the second year after vaccination in their study subjects. The authors suggest that altering the current immunization schedule to give the dose at or after 15 months of age or including a second booster dose may solve the problems they observed in their study. Although further study is warranted, according to the article, it is clear that the incidence and severity of varicella has decreased as a result of the wide use of varicella vaccine. The citation for the article is "Effectiveness of Varicella Vaccine Over Time" by Vazquez, et al; *JAMA*. 2004; 291:851-855.

STUDY DEMONSTRATES EFFECTIVE PAIN REDUCTION FOR INFANT IMMUNIZATIONS

Infants receiving multiple immunization injections experienced significantly reduced crying when provided with sucrose, oral tactile stimulation, and parental holding according to a study published in the November 2003 issue of the *Archives of Pediatric and Adolescent Medicine*. Further, parents strongly preferred the method used, and nurses reported that vaccines were easily administered.

The infants in the intervention group, when receiving their two-month immunizations consisting of four injections, were held by their parents and were offered sucrose and oral tactile stimulation (with a pacifier or a bottle). The control group did not receive these interventions.

Immunization injections are the most common painful pediatric procedure, yet there are few options for distracting infants during injections. According to the results of the study, this effective, convenient and inexpensive pain reduction approach can be easily adopted as part of standard infant immunization practice.

The citation for the complete article, "Effective Pain Reduction for Multiple Immunization Injections in Young Infants" is: Cohen, et al. *Arch Pediatr Adolesc Med*. 2003; 157:115-1120

8TH EDITION OF THE "PINK BOOK" NOW AVAILABLE

The 8th edition of "Epidemiology and Prevention of Vaccine-Preventable Diseases," widely known as the "Pink Book," is now available in print for purchase and online for free downloading. A comprehensive source of current epidemiologic data and vaccine recommendations, the 8th edition includes a new chapter on meningococcal disease.

The cost of the "Pink Book" is \$29 plus shipping and handling. To order a copy, choose one of the following methods: call (877) 252-1200 or (800) 418-7246 between 9:00 am and 5:00 pm ET; send a fax order with credit card or purchase order information to (301) 843-0159; or visit the Public Foundation (PHF) bookstore at: <http://bookstore.phf.org/prod171.htm>

To print a ready-to-copy (PDF) format of the entire "Pink Book" or selected chapters, go to: <http://www.cdc.gov/nip/publications/pink>

EVALUATION OF INVALID VACCINE DOSES

Immunization providers should be aware of proper immunization timing to reduce the administration of invalid doses of vaccines, according to a study in the January 2004 issue of the *American Journal of Preventative Medicine*. This conclusion was based on the vaccination histories of children sampled by the 2000 National Immunization Survey.

Nationally about 595,000 children aged 19-35 months, born between February 1997 and May 1999, received at least one invalid dose of vaccine. *Over half of the invalid doses were from hepatitis B series, most commonly receiving doses at less than the minimum interval.* Washington State was one of 11 states with at least 12% of that age group having received one or more invalid doses.

The citation for the article, "Evaluation of Invalid Vaccine Doses" is *Am J Prev Med*. 2004; 26: 34-40 or online at: www.sciencedirect.com/science/journal/07493797

IMMUNIZATION RESOURCES

Hepatitis B Foundation Improved Website

The Hepatitis B Foundation (HBF) continues to expand and improve its website to provide accurate hepatitis B information to those who need it most. HBF recently added Spanish and Simplified Chinese, a Frequently Asked Question section, and a free parent packet titled "Information for Parents of Young Children with Hepatitis B." This resource contains information on issues surrounding children and hepatitis B including international and domestic adoption, treatment, education, and social issues. To access the website, go to: <http://www.hepb.org/>